



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,104	06/25/2004	Tsuyoshi Nishimoto	62533.00015	2743
32294 7590 06/29/2007 SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER SPAHN, GAY	
			ART UNIT 3635	PAPER NUMBER
			MAIL DATE 06/29/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/500,104		NISHIMOTO ET AL.	
	Examiner		Art Unit	
	Gay Ann Spahn		3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004 and 04 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,5-8 and 12-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>25 June 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of SPECIES VIII (i.e., Figs. 32-37) and SUBSPECIES I (i.e., Fig. 34(a)) in the reply filed on 04 May 2007 is acknowledged.

In the Remarks Section, last paragraph on page 2 of the "Response to Election of Species Requirement" filed 04 May 2007, Applicants request clarification of whether SUBSPECIES II of SPECIES VIII should have been Fig. 37(a) rather than 27(a). Applicants are correct that the Election of Species Requirement mailed on 10 April 2007 had a typographical error therein and SUBSPECIES II should have listed Fig. 37(a) rather than 27(a).

Applicant has listed claims 1, 4, 9, 10, and 11 as being readable upon the elected SPECIES VIII (Figs. 32-37) and SUBSPECIES I (i.e., Fig. 34(a)).

Therefore, claims 2, 3, 5-8, and 12-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 04 May 2007.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 25 June 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

The drawings are objected to because:

(1) Fig. 8, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1) and the direction arrow should be labeled with a reference numeral and explained in the specification;

(2) Fig. 9, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1);

(3) Figs. 11(a) and 11(b), the arrow connecting the two figures should be deleted and a dashed lead line leading from the dashed circle in Fig. 11(a) should be labeled --XII(b)-- to indicate that the enlarged or detailed view is located in Fig. 11(b) pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(4) Fig. 24, section lines "X-X", "Y1-Y1", "Y2-Y2", "Y3-Y3", and "YC-YC" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view

number the sectional views can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(5) Fig. 31, section lines "Y4-Y4" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view number the sectional views can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(6) Fig. 32, section lines "Y5-Y5" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view number the sectional views can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(7) Fig. 35(a), a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1) and the direction arrows should be labeled with a reference numeral and explained in the specification;

(8) Fig. 36, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1) and the direction arrows should be labeled with a reference numeral and explained in the specification;

(9) Fig. 40, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1) and the direction arrows should be labeled with a reference numeral and explained in the specification;

(10) Fig. 43(a), section lines "A-A", "B-B", and "C-C" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view number the sectional views

Art Unit: 3635

can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(11) Figs. 44(a) and 44(b), a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1) and the direction arrows should be labeled with a reference numeral and explained in the specification;

(12) Fig. 48(a), section lines "D-D" and "E-E" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view number the sectional views can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(13) Figs. 49(a) and 49(b), a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1) and the direction arrows should be labeled with a reference numeral and explained in the specification;

(14) Fig. 50, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1);

(15) Fig. 52(a), section line "F-F" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view number the sectional views can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(16) Fig. 53(a), a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1);

(17) Fig. 54, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1) and the direction arrows should be labeled with a reference numeral and explained in the specification;

(18) Fig. 55, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1) and the direction arrows should be labeled with a reference numeral and explained in the specification;

(19) Fig. 59, section lines "X1-X1", "X3-X3", and "X4-X4" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view number the sectional views can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(20) Fig. 61, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1);

(21) Fig. 62, section line "X2-X2" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view number the sectional views can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(22) Fig. 64, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1) and the direction arrows should be labeled with a reference numeral and explained in the specification;

(23) Fig. 69, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1);

(24) Fig. 71, section lines "X5-X5" and "X6-X6" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view number the sectional views can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification;

(25) Fig. 73, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1);

(26) Fig. 77, a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1);

(27) Figs. 78(a) and 78(b), a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1);

(28) Figs. 81(a) and 81(b), a bracket should be inserted to so as to embrace the separated parts of the exploded view as is required by 37 CFR 1.84(h)(1);

(29) Fig. 82, section line "X7-X7" should be re-labeled with the correct Arabic or Roman numerals to indicate in what view number the sectional views can be found pursuant to 37 CFR 1.84(h)(3) and comparable changes should be made to the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. The following is but a few of the errors that the examiner has noticed and that must be corrected.

The disclosure is objected to because of the following informalities:

(1) page 3, line 20, the reference to "claim 1" must be omitted as claim numbering may change during prosecution;

(2) page 4, line 7, the reference to "Claim 2" must be omitted as claim numbering may change during prosecution;

(3) page 4, line 8, the reference to "Claim 1" must be omitted as claim numbering may change during prosecution;

(4) page 4, line 16, the reference to "Claim 3" must be omitted as claim numbering may change during prosecution;

(5) page 4, line 17, the reference to "Claim 1" must be omitted as claim numbering may change during prosecution;

(6) page 4, line 25, the reference to "claim 4" must be omitted as claim numbering may change during prosecution;

(7) page 4, line 26, the reference to "claim 1" must be omitted as claim numbering may change during prosecution;

(8) page 5, line 10, the reference to "Claim 5" must be omitted as claim numbering may change during prosecution;

(9) page 5, line 11, the reference to "Claim 4" must be omitted as claim numbering may change during prosecution;

(10) page 5, line 25, the reference to "claim 6" must be omitted as claim numbering may change during prosecution;

(11) page 5, line 26, the reference to "claims 1 through 5" must be omitted as claim numbering may change during prosecution;

(12) page 6, line 13, the reference to "claim 7" must be omitted as claim numbering may change during prosecution;

(13) page 6, line 14, the reference to "claim 6" must be omitted as claim numbering may change during prosecution;

Art Unit: 3635

(14) page 7, line 1, the reference to "Claim 8" must be omitted as claim numbering may change during prosecution;

(15) page 7, line 2, the reference to "Claim 6" must be omitted as claim numbering may change during prosecution;

(16) page 7, line 21, the reference to "claim 9" must be omitted as claim numbering may change during prosecution;

(17) page 7, line 22, the reference to "claims 1 through 5" must be omitted as claim numbering may change during prosecution;

(18) page 8, line 15, the reference to "claim 10" must be omitted as claim numbering may change during prosecution;

(19) page 8, line 16, the reference to "claim 9" must be omitted as claim numbering may change during prosecution;

(20) page 9, line 3, the reference to "claim 11" must be omitted as claim numbering may change during prosecution;

(21) page 9, line 4, the reference to "claim 9" must be omitted as claim numbering may change during prosecution;

(22) page 9, line 24, the reference to "Claim 12" must be omitted as claim numbering may change during prosecution;

(23) page 9, line 25, the reference to "Claims 1 through 5" must be omitted as claim numbering may change during prosecution;

(24) page 10, line 9, the reference to "Claim 13" must be omitted as claim numbering may change during prosecution;

(25) page 10, line 10, the reference to "Claims 1 through 5" must be omitted as claim numbering may change during prosecution;

(26) page 10, line 19, the reference to "Claim 14" must be omitted as claim numbering may change during prosecution;

(27) page 13, line 11, the reference to "Claim 15" must be omitted as claim numbering may change during prosecution;

(28) page 13, line 12, the reference to "Claim 14" must be omitted as claim numbering may change during prosecution;

(29) page 14, line 17, the reference to "Claim 16" must be omitted as claim numbering may change during prosecution;

(30) page 14, line 18, the reference to "Claim 14" must be omitted as claim numbering may change during prosecution;

(31) page 15, line 23, the reference to "Claim 17" must be omitted as claim numbering may change during prosecution;

(32) page 15, line 24, the reference to "Claim 14" must be omitted as claim numbering may change during prosecution;

(33) page 16, line 9, the reference to "Claim 18" must be omitted as claim numbering may change during prosecution;

(34) page 16, line 10, the reference to "Claim 14" must be omitted as claim numbering may change during prosecution;

(35) page 16, line 23, the reference to "Claim 19" must be omitted as claim numbering may change during prosecution;

(36) page 16, line 24, the reference to "Claim 14" must be omitted as claim numbering may change during prosecution;

(37) page 17, line 12, the reference to "Claim 21" must be omitted as claim numbering may change during prosecution;

(38) page 17, line 13, the reference to "Claims 14 through 19" must be omitted as claim numbering may change during prosecution;

(39) page 17, line 22, the reference to "claim 21" must be omitted as claim numbering may change during prosecution;

(40) page 15, line 27, the reference to "Claim 22" must be omitted as claim numbering may change during prosecution;

(41) page 19, line 1, the reference to "Claim 21" must be omitted as claim numbering may change during prosecution;

(42) page 19, line 16, the reference to "claim 23" must be omitted as claim numbering may change during prosecution;

(43) page 19, line 17, the reference to "claim 21 or 22" must be omitted as claim numbering may change during prosecution;

(44) page 19, line 25, the reference to "Claim 24" must be omitted as claim numbering may change during prosecution;

(45) page 19, line 26, the reference to "Claim 23" must be omitted as claim numbering may change during prosecution;

(46) page 21, line 1, the reference to "claim 25" must be omitted as claim numbering may change during prosecution;

(47) page 21, line 2, the reference to "claim 23" must be omitted as claim numbering may change during prosecution;

(48) page 21, line 14, the reference to "claim 26" must be omitted as claim numbering may change during prosecution;

(49) page 21, line 15, the reference to "claim 25" must be omitted as claim numbering may change during prosecution;

(50) page 21, line 26, the reference to "Claim 27" must be omitted as claim numbering may change during prosecution;

(51) page 21, line 27, the reference to "Claim 21 or 22" must be omitted as claim numbering may change during prosecution;

(52) page 22, line 15, the reference to "Claim 28" must be omitted as claim numbering may change during prosecution;

(53) page 22, line 16, the reference to "Claim 27" must be omitted as claim numbering may change during prosecution;

(54) page 23, line 2, the reference to "claim 29" must be omitted as claim numbering may change during prosecution;

(55) page 23, line 3, the reference to "claim 26 or 28" must be omitted as claim numbering may change during prosecution;

(56) page 23, line 14, the reference to "Claim 30" must be omitted as claim numbering may change during prosecution;

(57) page 23, line 15, the reference to "Claim 21 or 22" must be omitted as claim numbering may change during prosecution;

(58) page 24, line 6, the reference to "claim 31" must be omitted as claim numbering may change during prosecution;

(59) page 24, line 7, the reference to "claim 21 or 22" must be omitted as claim numbering may change during prosecution;

(60) page 25, line 2, the reference to "Claim 32" must be omitted as claim numbering may change during prosecution;

(61) page 25, line 3, the reference to "Claim 21 or 22" must be omitted as claim numbering may change during prosecution;

(62) page 28, line 2, after "29", --(a)-- should be inserted;

(63) page 30, line 1, after "43", --(a)-- should be inserted;

(64) page 30, line 2, after "43", --(a)-- should be inserted; and

(65) page 42, line 4, after the first occurrence of the word "of", the quotation marks should be changed presumably to a number to show an angle of inclination.

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, and 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 1, the transitional phrase "composed of" is vague, indefinite, and confusing as it is not clear if this means "comprising" so as to be open-ended or "consisting of" so as to be closed;

Claim 10, line 4, the recitation of "the linking groove" is vague, indefinite, and confusing as lacking antecedent basis since it is not clear which of the linking grooves this is referring back to.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by COX (U.S. Patent No. 3,962,838).

As to claim 1, COX discloses a staircase (20) composed of:

a pair of right and left stringers (only one side shown in Fig. 2) composed of truss structural members (see Fig. 2 wherein truss includes 38, 40 interconnected with 28, 44); and

treads,

wherein the truss structural members are each composed of:

an upper chord member (38) and a lower chord member (40) which are inclined with the slope of the staircase; and

a plurality of lattice members (28, 44 or 44R) for linking the upper chord member (38) and the lower chord member (40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over COX (U.S. Patent No. 3,962,838) in view of MIYAKE (Japanese Patent Application Publication No. JP 04-179762).

As to claim 4, COX discloses the staircase of claim 1 as discussed above.

COX fails to explicitly disclose that the truss structural members are linked to each other via a plurality of linking members which are laid horizontally at each riser height, and wherein the treads are fixedly supported on the linking members.

MIYAKE discloses truss structural members (3) are linked to each other via a plurality of linking members (4, 5 of 1) which are laid horizontally at each riser height, and wherein the treads (2) are fixedly supported on the linking members (4, 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the staircase of COX by making the truss structural members be linked to each other via a plurality of linking members which are laid horizontally at each riser height, and making the treads be fixedly supported on the linking members as taught by MIYAKE in order to connect the left and right truss structural members to each other while at the same time providing support for the treads of the staircase.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over COX (U.S. Patent No. 3,962,838) in view of KAWAMURA ET AL. (Japanese Patent Application Publication No. JP 2000-352122).

As to claim 9, COX discloses the staircase of claim 1 as discussed above.

COX fails to explicitly disclose that the truss structural members are each composed of node members each disposed at a node point, and frame members for linking adjacent node members.

KAWAMURA ET AL. disclose truss structural members composed on node members (8 in Fig. 8) each disposed at a node point (see Fig. 7), and frame members (7 in Fig. 9) for linking adjacent node members.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the staircase of COX by making the truss structural members be composed of node members each disposed at a node point, and frame members for linking adjacent node members as taught by KAWAMURA ET AL. in order

to be able to have a truss structural member which has more "give" or in other words, is capable of flexing where the frame members meet the node members.

As to claim 10, COX in view of KAWAMURA ET AL. discloses the staircase of claim 9 as discussed above, and KAWAMURA ET AL. also disclose that the node members (8) are column-shaped and each have linking grooves (15) on an outer surface thereof, the frame members (7) each have linking end parts (10) on both ends, and the linking groove (15) and the linking end parts (10) have notches (14 on 15, 12 on 10) to be engaged with each other, and nodes (@ 8 in Fig. 7) are formed by press fitting the linking end parts (10) into the linking grooves (15).

As to claim 11, COX in view of KAWAMURA ET AL. discloses the staircase of claim 9 as discussed above, and the resulting staircase from the combination of COX in view of KAWAMURA ET AL. discloses a reinforcing member (see Fig. 4 of COX, either 38' as a reinforcing member to upper chord member 38 or plates 40' as reinforcing members to lower chord member 40) arranged along at least one of the upper chord member (38 of COX) and the lower chord member (40 of COX), the reinforcing member (either 38' or 40' of COX) being fixed with at least three or more of the node members (8 of KAWAMURA ET AL. which would be situated at the junctures 54, 55 of COX in the modified staircase).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Various configurations of staircases having truss structural

members cited of interest include: U.S. Patent No. 624,782 to Fuchs; U.S. Patent No. 5,983,580 to Carr; U.S. Patent No. 5,085,291 to Narramore; U.S. Patent No. 2,532,649 to Thompson; and U.S. Patent No. 6,843,347 to Lamberson et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gay Ann Spahn whose telephone number is (571)-272-7731. The examiner can normally be reached on Monday through Friday, 10:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard E. Chilcot can be reached on (571)-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Art Unit: 3635

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gay Ann Spahn

Gay Ann Spahn, Patent Examiner
June 25, 2007